EXECUTIVE SUMMARY

In 1994, Marine Mammal Protection Act (MMPA) amendments created Section 118, which includes provisions concerning incidental mortality and serious injury of marine mammals in commercial fisheries. One objective of these provisions, as described in Section 118(b), is to achieve the zero mortality rate goal (ZMRG). This environmental assessment (EA) focuses on the first provision (the target) of Section 118(b), which is to reduce the mortality and serious injury of marine mammals incidental to commercial fisheries "to insignificant levels approaching a zero mortality and serious injury rate" by April 30, 2001 (although the deadline has passed, the requirement must still be met). Other Section 118(b) provisions of the ZMRG include: fisheries that maintain the target levels of incidental mortality and serious injury do not have to further reduce incidental mortality and serious injury rates; the Secretary shall review progress of all commercial fisheries toward achieving the target and submit a report to Congress; and if, after review, a fishery does not achieve the target, NMFS will take appropriate action as provided in Section 118(f), which describes the take reduction process including its long-term goal of achieving ZMRG.

There is currently no statutory or regulatory definition of what levels would be "insignificant levels approaching a zero mortality and serious injury rate." To determine if the goal of Section 118 is being met with respect to the ZMRG on a fishery-specific basis, it is necessary for the National Marine Fisheries Service (NMFS) to define ZMRG so that it can be quantified and individualized.

To determine progress of commercial fisheries, by fishery, toward the ZMRG as provided by MMPA Sections 118(b) and (f), NMFS proposes to determine a target level of incidental mortality and serious injury for each marine mammal stock affected by the commercial fishery under consideration when deciding whether that fishery has attained ZMRG. In this EA, the agency identifies this target level as the insignificance threshold (T_{ins}), which indicates the maximum amount of incidental mortality and serious injury that can be considered to be insignificant levels approaching a zero rate. If the amount of incidental mortality and serious injury is less than or equal to T_{ins} for a particular stock, the level of incidental mortality and serious injury would be considered insignificant and approaching a zero rate for that stock, and that fishery would be considered as having met the ZMRG.

The No Action Alternative would maintain status quo, thus not presenting any regulatory definition of ZMRG. Although there is no regulatory definition of ZMRG, NMFS has been using the criterion of ten percent of a stock's potential biological removal level (PBR) in stock assessment reports (SARs). However, ZMRG would continue to have no regulatory definition; thus, it would be unclear how ZMRG applies in the implementation of MMPA Section 118.

The action alternatives differ only in the way T_{ins} is calculated. Because T_{ins} is calculated differently under each action alternative, the number and types of fisheries resulting in marine mammal incidental mortality and serious injury greater than the T_{ins} differ under

- each alternative. NMFS has identified Alternative 2 as the preferred alternative for the
- proposed action. Alternative 2 defines T_{ins} as ten percent of the stock's PBR, which is the
- 49 informal interpretation of ZMRG used today and under the No Action Alternative.
- Alternative 2 would use varying recovery factors, and thus have different recovery
- delays, for stocks depending on their status. Alternative 3 defines T_{ins} as the value that
- would not cause more than a ten percent delay in recovery of the marine mammal stock.
- Alternative 3 is not consistent with Section 118 of the MMPA because it would result in
- an equivalent T_{ins} and PBR for endangered species; however, it is analyzed throughout
- 55 the EA for purposes of comparison. Alternative 4 defines T_{ins} as 0.1 percent of the
- minimum population estimate (N_{min}) for cetaceans or 0.3 percent of N_{min} for pinnipeds.
- Under Alternatives 3 and 4, T_{ins} would be calculated differently for cetaceans and
- 58 pinnipeds with T_{ins} being slightly higher for pinnipeds under both alternatives.

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Alternative 2 would be the most protective of endangered stocks, and Alternative 4 would be the most protective of healthy, robust stocks. Alternatives 2 and 4 would be equally protective of threatened, depleted, or unknown stocks while Alternative 3 would be the least protective of such stocks.

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Alternative 2 would protect the largest number of marine mammal stocks and would result in the largest number of commercial fisheries that would need to reduce incidental mortality and serious injury to achieve ZMRG. Alternative 3 would protect the fewest stocks, and Alternative 4 would protect a moderate number of stocks. Therefore, Alternative 3 would require reduction in incidental mortality and serious injury from the fewest commercial fisheries while Alternative 4 would require reduction in incidental mortality and serious injury from a moderate number of commercial fisheries. None of the alternatives would be likely to adversely affect essential fish habitat or species listed by the Endangered Species Act.

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The No Action Alternative would not impact fishery socioeconomics. Because Alternative 2 would affect the greatest number of fisheries, it would have the largest number of potential, minor, direct and indirect, negative impacts on fishery socioeconomics. Alternative 3 would have the fewest of such impacts, and Alternative 4 would have a moderate amount of such impacts. Under all action alternatives, impacts on fishermen are expected to be minor because they are represented on the TRT, and the TRT would take into consideration economic feasibility of the entire fishery when designing a TRP pursuant to MMPA Section 118(f). Generally, the opportunity costs are lost fishing time and potential income while the TRT meets. Opportunity costs to all fishery participants could result from potential TRP measures, such as time and area closures, that would reduce their fishing effort. Direct costs to all members of the fishery would be based on potential TRP measures. In addition to time and area restrictions as mentioned above, such measures could include gear modification or replacement, which would likely result in direct costs to the fishermen as they would have to alter their gear or purchase new types of gear.

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- 91 The preferred alternative, Alternative 2, would not result in any significant, adverse
- 92 impacts on the human environment, including protected marine populations, commercial
- 93 fisheries, fishermen, or other regulatory programs.